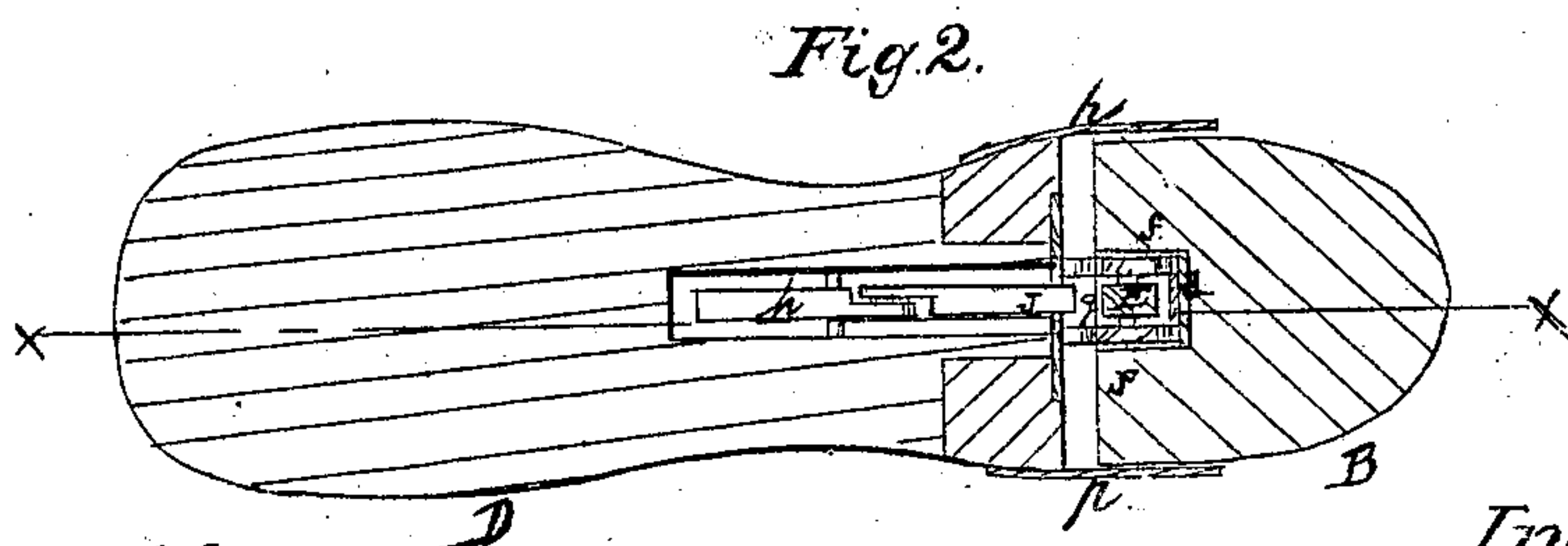
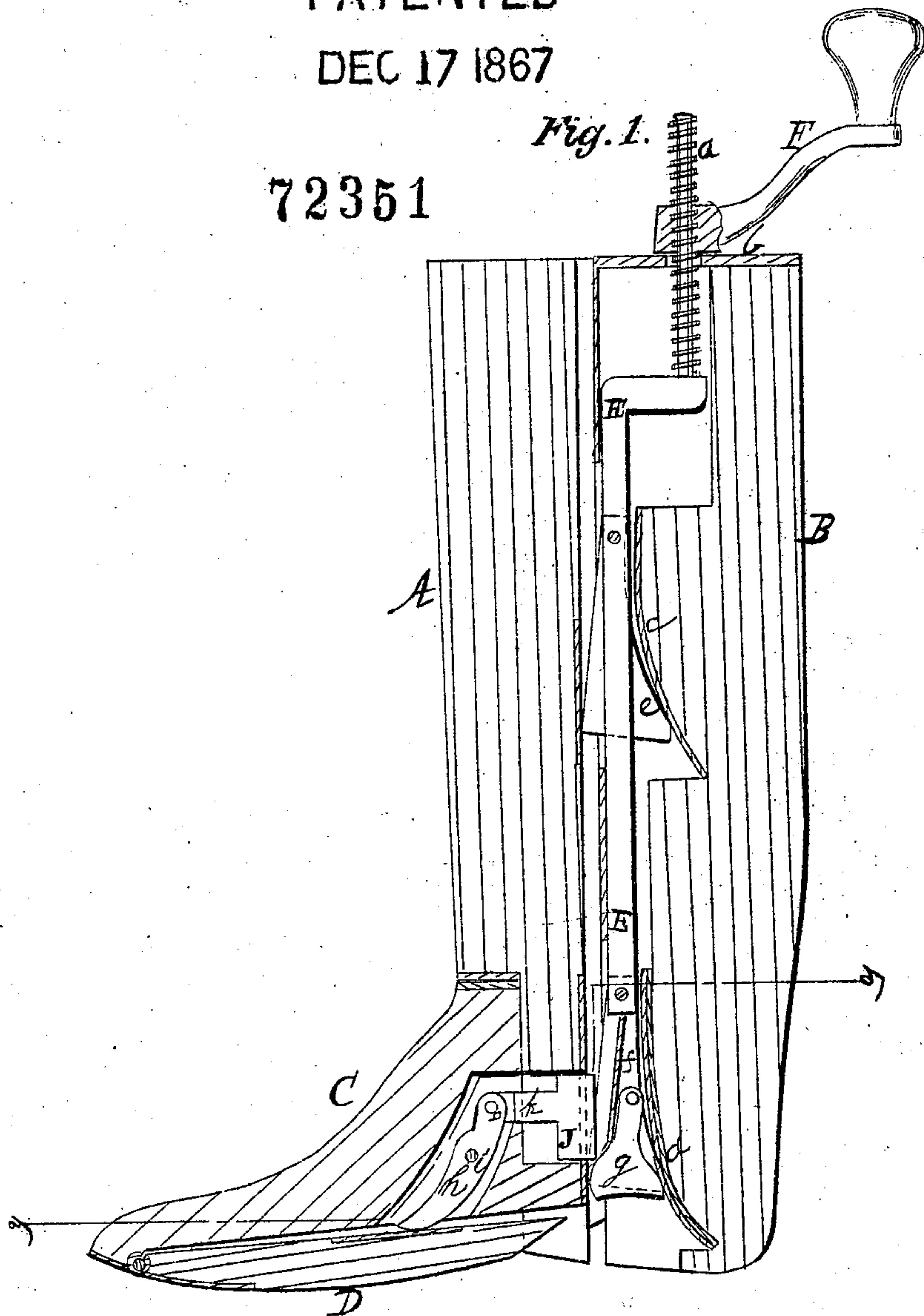


F.S. Wilt. Boot-Tree.

PATENTED

DEC 17 1867

72351



Witnesses:
Thos. Linse
J. A. Fraser

Inventor:
F. S. Wilt
Per Munnell
Attorney

United States Patent Office.

F. S. WILT, OF ALLENTOWN, PENNSYLVANIA.

Letters Patent No. 72,351, dated December 17, 1867.

IMPROVED BOOT-TREE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, F. S. WILT, of Allentown, in the county of Lehigh, and State of Pennsylvania, have invented a new and useful Improvement in Boot-Tree; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved method of constructing boot-trees; and the invention consists in an arrangement whereby the leg and foot of the boot are treed or expanded simultaneously by operating a single lever-nut on the upper end of the tree, as will be hereinafter described. The drawing—

Figure 1, represents a longitudinal central section of the tree, through the line *x x* of fig. 2, showing the operating parts, and the manner in which they are combined.

Figure 2 is a horizontal section through the line *y y* of fig. 1.

Similar letters of reference indicate corresponding parts.

This boot-tree does not differ in its outward form materially from others, where the parts are expanded by other means.

A is the front, and B the rear portion of the tree. The foot is attached to the front portion in the usual manner. The foot of the tree is in separate pieces, C being the instep and top of the foot, and D represents the sole. These two parts are hinged together as seen in the drawing. Between the parts A and B there is a bar, which is marked E, upon the upper end of which there is a screw, *a*, which passes through the metallic cap-piece *b* on the top of the part B. F is a lever or crank-nut on the screw *a*, as seen in the drawing. As the nut F is turned on to the screw *a*, the bar will be moved upward. The interior or bottom surface of the groove in the part B, in which the bar moves, is in the form represented in the drawing. Two convex surfaces are formed, *c* and *d*, which (if the body of the tree be made of wood) are lined with metal, as seen represented in blue. Attached to the bar E, on each side, there are curved triangular-shaped plates, *e* at the upper, and *f* at the lower portion, which on one edge conform to the shape of the curved or convex surfaces *c* and *d*. The arrangement is such that when the bar E is down, these plates *e* and *f* rest upon those curved surfaces on one edge, while the other edge is flush with the bar. When in this position the two parts of the tree A and B will come in contact, and the tree can be introduced into the boot. By drawing up the bar with the screw a short distance, the position seen in the drawing, the concave surfaces of the plates *e* and *f* will come in contact with the convex surfaces *c* and *d*, and the result is the two parts of the tree are forced apart as seen. The plates *e* and *f* are pivoted to the bar E, so that they work freely in the groove in B. The plates *f* are connected together, and are attached to the lower end of the bar E. *g* is an irregular-shaped plate, which is pivoted to the plates *f*, and which hangs pendulous from them, but it is governed in its upward movement by the curved or convex surface of *d*, the same as the other plates are. *h* is a lever, whose fulcrum is at *i*, the toe or lower end of which bears upon the sole-piece D, as seen in the drawing. J is a slide in a recess in the part A, which has an arm, *k*, which is connected with the lever *h*, as seen at the point *o*. This slide projects from A, so that when the bar and plate *g* are raised, the slide J will be forced inward, which will force the sole-piece D down by the lever *h*. This expansion at the sole takes place, as will be seen, simultaneous with the expansion of the leg, and both operations are performed by simply turning lever-nut F. *p p* are thin plates attached to the part A of the tree, which serve as guides for the back part B.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

1. The bar E, the plates *e*, *f*, and *g*, constructed and arranged as described, in combination with the curved or convex surfaces *c* and *d*, for the purposes set forth.

2. The slide J and the lever *h*, arranged and operating as shown and described, in combination with the bar E and plates *f* and *g*.

F. S. WILT.

Witnesses:

C. W. STUBEN,
GEORGE RITTER.